

REMARKS

Claims 1, 8, 9 and 11-14 are pending in the application. Claims 1, 9, 12 and 14 have been amended. Claims 2-7 and 10 have been canceled without prejudice or disclaimer. Reconsideration of this application is respectfully requested.

It is noted with appreciation that the Office Action has allowed claims 8, 9, 13 and 14 and has indicated that claims 11 and 12 would be allowable if rewritten to include all the limitations of the base claim and of any intervening claims.

Allowed claim 9 has been amended by changing “best match” to “match” to correct an antecedent issue. It is submitted that this amendment does not affect the allowed status of claim 9.

Claims 12 and 14 have been amended by changing “candidate” to “difference” to correct an inadvertent error. It is submitted that these amendments do not affect the allowable status of claim 12 and the allowed status of claim 14.

The Office Action rejects claims 1-14 under 35 U.S.C. 103(a) as unpatentable over U.S. Patent Publication No. 2003/0147468 to Matsumura et al., hereafter Matsumura, in view of U.S. Patent No. 6,310,921 to Yoshioka et al., hereafter Yoshioka.

The inclusion of claims 8, 9 and 11-14 in this listing is an inadvertent error since these claims are indicated in paragraphs 6 and 7 of the Office Action as allowed or allowable. The Examiner confirmed this in a brief telephone conversation on August 27, 2009.

This rejection is moot as to claims 2-7 and 10, which have been cancelled.

This rejection is respectfully traversed.

Independent claim 1 has been amended to recite:

“generating a predictively encoded data stream, in which predictions, that result in a reduction in the amount of reference data transferred from a secondary memory to a primary memory of a decoder during a decoding process, are favored”.

This language, which was previously in the preamble, positively recites the generating step in the body of amended independent claim 1. In addition, “secondary memory to a primary memory” has been changed to “secondary memory to a primary memory of a decoder”. This change clarifies that the predictions being favored are those “that result in a reduction in the amount of reference data transferred from a secondary memory to a primary memory of a decoder” and not of the encoder system.

Matsumura lacks the generating step. The Examiner did not cite any portion of Matsumura as disclosing or teaching the generating step. Applicants have been unable to find any disclosure or teaching of the generating step in either Matsumura or Yoshioka. Therefore, the combination of Matsumura and Yoshioka lacks the generating step.

Amended independent claim 1 further recites that the generating step comprises the recited steps of providing, finding, assigning and choosing. The providing step has been amended to read as follows:

“providing a primary memory model that emulates an operation of transferring and keeping a part of said reference data from said decoder secondary memory to said decoder primary memory in the decoding process”.

This amendment clarifies that the provided primary memory model “emulates an operation of transferring and keeping a part of said reference data from said decoder secondary memory to said decoder primary memory” and not transfer of data between the encoder’s external memory and internal memory.

The Examiner contends that the providing step is shown in Matsumura as internal memory 511 (Fig. 8) and a memory management function of memory interface 110. Matsumura teaches to use internal memory 511 as a bit frame buffer external memory 111 and encoder 501 for storing “a bit stream of a reconstructed mage used for the motion predicting process” (paragraph 0139). However, Matsumura does not teach that items 511 and 110 operate as a “primary memory module that emulates an operation of transferring and keeping a part of said reference data from said decoder secondary memory to said decoder primary memory in the decoding process”, where the decoding process is that of a decoder (see the generating step) and not that of encoder 501.

Matsumura’s encoder 501 includes coder/decoder devices 107, 108 and 109 to encode or compress the video input so as to save storage space and limit the number of accesses to external memory 111. The encoded data of a bit stream is later retrieved from external memory 111, stored in internal memory 511 and decoded when accessed for use by encoder 602 to encode the video input stream as the output bit stream. There is no teaching in Matsumura that internal memory 511 constitutes a “primary memory model that emulates an operation of transferring and keeping a part of said reference data from said decoder secondary memory to said decoder primary memory” as recited in the providing step. Yoshioka, which was cited for a different purpose, does not supply Matsumura’s deficiency. Therefore, the combination of Matsumura and Yoshioka lacks the providing step.

The choosing step has been amended to read as follows:

(e) “based on said assigned measures, choosing a particular one of the candidates to reduce accesses to said decoder secondary memory, thereby achieving said reduction in the amount of reference data transferred from said decoder secondary memory”.

The Examiner contends that Matsumura discloses the choosing step, citing paragraph 0018, lines 4-9. Paragraph 0018 describes a process of coding a P frame. This

description does not mention that a candidate is chosen to reduce accesses to said decoder secondary memory, thereby achieving said reduction in the amount of reference data transferred from said decoder secondary memory", as recited in amended independent claim 1. Yoshioka, which was cited for a different purpose, does not supply Matsumura's deficiency. Therefore the combination of Matsumura and Yoshioka lacks the choosing step.

For the reasons set forth above, it is submitted that the rejection of claim 1 under 35 U.S.C. 103(a) is obviated by the amendment and should be withdrawn.

The Office Action cites a number of patents that were not applied in the rejections of the claims. These patents have been reviewed, but are believed to be inapplicable to the claims.

Noting that claims 8, 9, 13 and 14 are allowed and that claims 11 and 12 are allowable, it is respectfully requested for the reasons set forth above that the rejection under 35 U.S.C. 103(a) be withdrawn, that claims 1, 11 and 12 also be allowed and that this application be passed to issue.

Respectfully Submitted,

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